



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION IX**

**75 Hawthorne Street**

**San Francisco, CA 94105-3901**

March 30, 2009

Ms. Judi Tapia  
US Bureau of Reclamation  
South Central California Area Office  
1243 N Street, Fresno, CA 93721-1813

Subject: Draft Environmental Impact Statement for Grassland Bypass Project,  
2010-2019 (CEQ# 20090025)

Dear Ms. Tapia:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our comments are provided pursuant to the Council on Environmental Quality comment deadline date of March 30, 2009. Our detailed comments are enclosed.

The Use Agreement for the Grassland Bypass Project (Project) is due to expire on December 31, 2009. The Bureau of Reclamation (Reclamation) and the San Luis and Delta-Mendota Water Authority (Authority) propose to extend the Use Agreement for the period of January 1, 2010 through December 31, 2019. The proposed project would continue to collect agricultural drain water from the Grassland Drainage Area before it can enter the Grassland wetland water supply channels, and convey it to the San Joaquin River via the Grassland Bypass Channel, San Luis Drain, and Mud Slough. The volume and concentration of this discharge would be progressively reduced to meet water quality objectives and compliance schedules in the San Joaquin River for selenium and other constituents of concern.

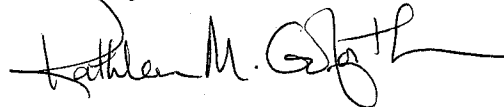
EPA commends the progress that this Project has made to date. We support continued efforts by Reclamation and the Authority to increase on-farm source controls and conservation, and implement the regional agricultural drain water reuse and treatment facility (San Joaquin River Water Quality Improvement Project (SJRIP)) to meet water quality objectives in Mud Slough. The proposed updated compliance monitoring plan, revised selenium and salinity load limits, enhanced incentive performance fee system, new Waste Discharge Requirements, and additional habitat mitigation for the continued use of Mud Slough are important elements of this plan. Given the clear interconnections between surface and groundwater in this region, we urge continued efforts to both improve surface water quality and avoid degradation of groundwater quality.

While we acknowledge the significant progress that has been made by the Grassland Bypass Project we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed “*Summary of Rating Definitions*”). Our main concern is the uncertainty-- acknowledged in the DEIS--of developing feasible methods of drain water treatment and disposal that would make it possible to meet selenium objectives by 2019 and arrest buildup of selenium in groundwater. To continue farming and also meet environmental objectives, a breakthrough that removes selenium from the system is needed. Reclamation re-evaluated and chose not to include in the current Project other actions (such as reducing irrigation through targeted land fallowing, and implementing on-farm drainage management systems) that could be added to the proposed action to help achieve the water quality goals. These options may prove attractive as the Project evolves—particularly if regional treatment is infeasible.

Our other concerns are the needs for a comprehensive monitoring program, including biological effects follow-up, and a clear commitment to detailed analysis of sediment treatment, management, and disposal options and their effects. We also believe the final environmental impact statement (FEIS) should consider how this project interacts with, and can be coordinated with, other regional efforts to address drainage issues. EPA recommends that Reclamation and the Authority continue to vigorously seek a long-term solution that minimizes environmental effects at a sustainable public and private cost.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send one hard copy and a CD ROM to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3521, or contact Laura Fujii, the lead reviewer for this project. Laura can be reached at (415) 972-3852 or [fujii.laura@epa.gov](mailto:fujii.laura@epa.gov).

Sincerely,



Kathleen M. Goforth, Manager  
Environmental Review Office  
Communities and Ecosystems Division

Enclosures: Detailed Comments  
Summary of Rating Definitions

cc: Joseph C. McGahan, San Luis and Delta-Mendota Water Authority  
Joy Winckel, US Fish and Wildlife Service  
Theresa Presser, US Geological Survey  
Kathy Norton, US Army Corps of Engineers  
Rudy Schnagl, Central Valley Regional Water Quality Control Board  
Julie Vance, California Department of Fish and Game, Fresno, CA  
John Beam, California Department of Fish and Game, Los Banos, CA.

**Monitoring**

***Develop a comprehensive monitoring program that includes multiple contaminants and follow-up monitoring for detected biological effects.*** Monitoring for various purposes, such as tracking compliance and mitigation, would be conducted within the context of the Grassland Bypass Project (Project). EPA supports the mitigation monitoring and reporting program, as described in Section 15, and the recognition that this program should cover biological as well as water quality and sediment components (p. 2-20).

The DEIS reports on constituents of immediate interest to the Project. However, Mud Slough and the San Joaquin River below Mud Slough are also impaired by toxicity (unknown sources), pesticides, and (for the River) mercury (Clean Water Act 303(d) list, 2006), suggesting that a comprehensive view of biological condition needs to take into account a variety of stressors. Furthermore, accumulation of contaminants in the regional agricultural drain water reuse and treatment facility is likely to occur and should continue to be monitored.

There may be monitoring gaps that prevent assessment of beneficial use conditions overall—even when taking into account both Project monitoring and the monitoring activities for other projects or by other parties in the area. Some monitoring needs might be accomplished through coordination with other programs in the region, such as monitoring associated with the San Joaquin River Restoration Settlement. According to the DEIS, the Oversight Committee has responsibilities for review and modification, as needed, of the monitoring program.

***Recommendations:***

The FEIS should provide a more complete discussion of monitoring activities in the area, including explanation of any differences between requirements under the Irrigated Land Regulatory Program (ILRP) and the Project. Because the Grasslands Drainage Area already has Waste Discharge Requirements, it is not subject to the ILRP and its monitoring and reporting requirements.

We recommend the Bureau of Reclamation (Reclamation) and the San Luis and Delta-Mendota Water Authority (Authority), with the guidance of the Oversight Committee, develop a comprehensive monitoring program that includes multiple contaminants (comparable to the ILRP) and follow-up monitoring for detected biological effects. For example, we recommend consideration of monitoring regarding pesticides associated with toxicity and sub-lethal effects, and regarding the effects of mercury.

We note that the DEIS analysis of potential impacts of selenium on migrating salmon in the San Joaquin River (p. 6-52) appears to conflict with analyses from the National Marine Fisheries Service and U.S. Fish and Wildlife Service.<sup>1</sup> We recommend coordinating with the agencies responsible for implementing the San Joaquin River Restoration Settlement to design studies and monitoring to improve the understanding of potential fish impacts.

### **Sediment Management**

***Reduce sediment transport, and commit to detailed analysis of sediment treatment, management, and disposal options and their effects.*** The DEIS states that sediment accumulation in the San Luis Drain is adversely affected by use of the drain. However, dredging and sediment disposal may be problematic because of selenium levels in the sediment. The DEIS includes a Sediment Management Plan that would remain in place during the period of the extension. Information on the sediment quality is incomplete.

#### ***Recommendation:***

The FEIS should include additional information on potential sediment removal measures, their feasibility, whether or not sediment removal and disposal would require a Clean Water Act Section 404 permit, and potential adverse effects on disposal areas and continued operation of the Project. Indicate whether eventual removal of the sediment from the San Luis Drain could make the Project cost prohibitive. We recommend a clear commitment to detailed analysis of sediment treatment, management, and disposal options and their effects, when appropriate.

With respect to prospects of future sediment deposition, we recommend the FEIS and Sediment Management Plan include a detailed description and evaluation of options to reduce sediment mobilization and transport.

### **Regional Water Quality Improvement**

***Coordinate the Grassland Bypass Project with other regional water quality improvement efforts.*** Although the DEIS lists several other regional water resource programs—notably, the final settlement regarding the San Luis Unit agricultural drainage; adoption and implementation of a boron/salinity TMDL (with objectives) for the San Joaquin River upstream of Vernalis; and the San Joaquin River Restoration Program—it does not discuss how these programs may interrelate or be coordinated in the future.

#### ***Recommendation:***

The FEIS should discuss ways in which the major programs may interrelate, particularly where they are complementary, have opportunities to coordinate, or could conflict.

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<sup>1</sup> U.S. Fish and Wildlife Service and National Marine Fisheries Service. 2000. Formal Section 7 Consultation on the Environmental Protection Agency's Final Rule for the Promulgation of Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California.

Including more detailed maps that show key regional features, flow direction, and other water quality improvement projects would help this discussion. While the DEIS provides a useful map of the project area, it does not include detailed regional overview maps.

**U.S. Environmental Protection Agency Rating System for  
Draft Environmental Impact Statements  
Definitions and Follow-Up Action\***

**Environmental Impact of the Action**

**LO – Lack of Objections**

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

**EC – Environmental Concerns**

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

**EO – Environmental Objections**

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

**EU – Environmentally Unsatisfactory**

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

**Adequacy of the Impact Statement**

**Category 1 – Adequate**

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

**Category 2 – Insufficient Information**

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

**Category 3 – Inadequate**

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.